

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 January 2004 (08.01.2004)

PCT

(10) International Publication Number
WO 2004/002727 A1

(51) International Patent Classification⁷: **B31F 1/07**

(74) Agents: MANNUCCI, Michele et al.; Uff. Tecn. Ing. A. Mannucci S.r.l, Via della Scala, 4, I-50123 Firenze (IT).

(21) International Application Number:
PCT/IT2003/000377

(22) International Filing Date: 19 June 2003 (19.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
FI2002A00113 26 June 2002 (26.06.2002) IT

(71) Applicant (for all designated States except US): **FABIO PERINI S.p.A.** [IT/IT]; Zona Ind.le P.I.P Mugnano Sud, I-55100 Lucca (IT).

(72) Inventor; and

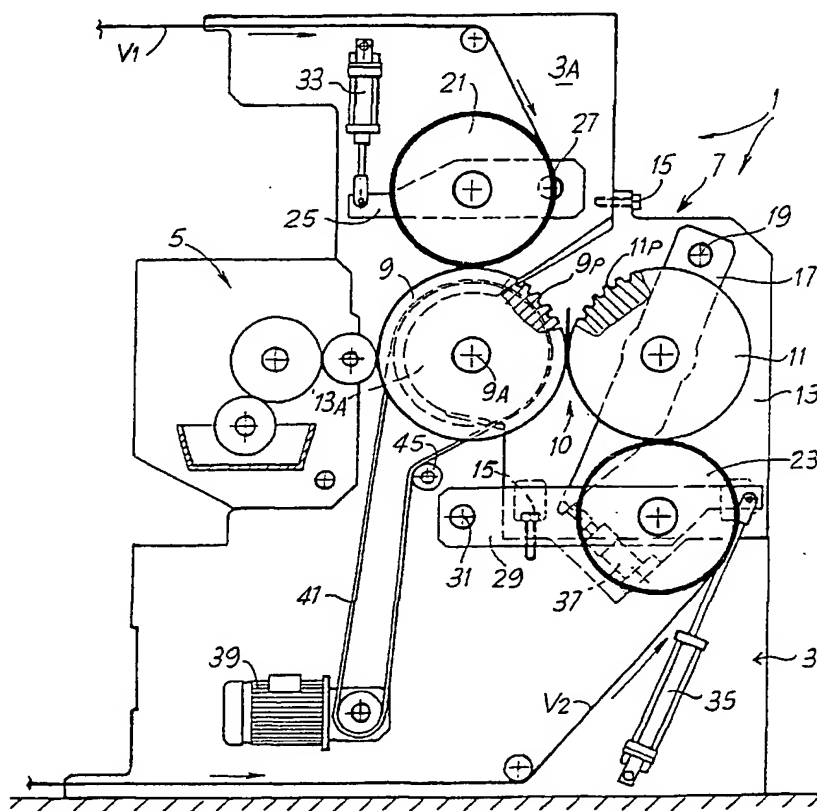
(75) Inventor/Applicant (for US only): **BIAGIOTTI, Guglielmo** [IT/IT]; Via di Vorno, 105, I-55060 Capannori (IT).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: EMBOSSED AND LAMINATING MACHINE WITH INTERCHANGEABLE EMBOSSED CYLINDERS ASSEMBLY



(57) Abstract: The embossing and laminating device comprises: a supporting structure (3); a first embossing cylinder (9) provided with protuberances (9P); a first pressure roller (21) cooperating with said first embossing cylinder (3); a second embossing cylinder (11), provided with protuberances (11P); a second pressure roller (23) cooperating with said second embossing cylinder (11). The first and the second embossing cylinder (9, 11) are carried by an interchangeable assembly or sub-structure (7), which can be mounted on and removed from the fixed structure.

WO 2004/002727 A1